

## 7. Add Rumble Strips

### Overview

Rumble strips are pavement undulations that, when traversed by the tires of a vehicle, create an audible cue to alert the driver of the vehicle of a potential hazard. One common application of rumble strips is placement in a series at the approach to an intersection. The intersection application is used to warn drivers as they approach an isolated intersection (usually a stop sign location). A second, and more widely used, application of rumble strips is longitudinal placement along the edge of a road. Longitudinal rumble strips are used to warn drivers they are about to exit the traveled way. Another less common application of longitudinal rumble strips is centerline rumble strip placement to warn drivers they are about to cross into an opposing lane of travel. This rumble strip application is not common in Georgia. Rumble strips can be rolled into new pavement, or milled into the pavement. In addition, there are thermoplastic rumble strips that can be applied in unique locations like work zones. Morgan and McAuliffe (1997) recommend that continuous-shoulder rumble strips are preferable to cluster-type rumble strips. They also indicate that noise complaints from both drivers and nearby residents must be considered. Similarly, rumble strip placement should be compatible with bicycle activity if applicable at the location of interest.

### Crash Application

Placement of rumble strips should be considered for crashes where it appears the driver was inattentive but the minor stimulus from the audible cue of the rumble strip would alert the driver to the prospective hazard. For example, if an inattentive driver crossed the paved shoulder while exiting the road, this countermeasure may be applicable if the paved shoulder had a width greater than two-feet. (In Georgia, a paved shoulder must be wider than two-feet before the standard rolled in rumble strips can be applied.) If the crash occurred in a residential neighborhood, rumble strips are not acceptable countermeasures due to their associated noise.

## 8. Improve Roadway Access Management

### Overview

The frequent placement of driveways or street intersections without coordination with surrounding land development can create a hazard. For example, a driveway located near an intersection can create conflicts between vehicles turning into the driveway and vehicles traveling through the intersection with the expectation that they have right-of-way. One example may be a driver elects to turn left into a driveway located 50-feet beyond the far side on an intersection. The light turns green and the car following the vehicle expects it to continue beyond the intersection location and increase speed. As a result, the poor access management contributes to a potential rear-end collision.

### Crash Application

Improvement of roadway access is a feasible crash countermeasure if an alternative access opportunity is present. For example, if two driveways are so closely placed to